

REMARKS

Applicants respectfully request the above-identified application be re-examined.

The June 18, 2003, Office Action ("Office Action") rejected Claims 1, 3, 5-7, 9, 10, 13, 14, 16-20, 22-28, 30, 32, and 33 under 35 U.S.C. § 102(e) as being anticipated by the teachings of U.S. Patent 6,334,815 (Miyamoto et al.). Claims 2, 8, 11, and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of Miyamoto et al. taken in view of the teachings of U.S. Patent No. 6,042,478 (Ng). For the reasons hereinafter set forth, applicants respectfully disagree with the rejections set forth in the Office Action and submit that all of the rejected claims are allowable.

Prior to setting forth the reasons why applicants disagree with the rejections set forth in the Office Action, a brief description of the present invention followed by a brief description of the cited and applied references is set forth. The following discussions of applicants' invention and the cited and applied references are not provided to define the scope or interpretation of any of the claims of this application. Instead, these discussions are provided to help the United States Patent and Trademark Office better appreciate important claim distinctions discussed thereafter.

The Invention

The present invention is directed to a system, method, and data storage medium for sharing information (data) between separately executable programs. One application of the invention is sharing data between video games.

In one form the data sharing system includes **a control unit having a processor and a memory coupled to the processor. The memory included in the control unit stores information pertaining to a first program that was previously executed by the processor.** The data sharing system also includes a data storage medium that stores a second program executable by the processor. When executed by the processor, the second program retrieves information pertaining to the first program from the memory and utilizes the information pertaining to the first program with the execution of the second program.

In an alternative form the system includes **a control unit having a processor and a memory coupled to the processor.** The system also includes a first data storage medium coupleable to the processor. The first data storage medium stores a first program that is implementable by the processor. When implemented by the processor, **the first program identifies information pertaining to the first program for sharing with a second program.** When implemented by the processor, the first program also requests storage of the information

pertaining to the first program **in the memory coupled to the processor** for retrieval by the second program.

In one form the method includes connecting a first storage medium having a first program stored therein to a processor and transferring data pertaining to a first program **to a memory coupled to the processor**. The method further includes connecting a second data storage medium having a second program stored therein to **the processor, and retrieving the data pertaining to the first program from the memory coupled to the processor** and using the data in connection with the second program.

In one form the data storage medium contains a software program that when implemented by a processor retrieves information provided by another software program **from a memory coupled to the processor** and utilizes the retrieved information in conjunction with the software program contained on the data storage medium.

In another form the data storage medium contains a first software program that when implemented by a processor identifies information for sharing with a second program and stores the identified information **in a memory coupled to the processor** for retrieval by the second software program.

U.S. Patent No. 6,334,815 (Miyamoto et al.)

Miyamoto et al. teaches a game system that comprises **a first backup data memory for storing backup data obtained by processing a first game program stored in a first game memory by a first processing system included in a first game machine. The game system also comprises a second game machine having a second processing system. The game system further comprises accessing circuitry for permitting the second processing system to access the first backup memory, a second backup data memory provided in association with the second game machine for temporarily storing the backup data read out of the first backup data memory by the second processing system and a second game program memory provided in association with the second game machine for storing a second game program to be processed by the second processing system. The second processing system effects a game associated with the backup data by executing the second game program stored on the second game program memory while utilizing the backup data stored in the second backup data memory.** (Column 2, line 56, through Column 3, line 7)

While, in some respects, Miyamoto et al. appears to disclose certain aspects of the present invention, there are substantial differences. **Miyamoto et al. requires two game**

machines and multiple memories. The first game machine includes a first backup memory for storing data obtained from a first processing system included in a first game machine during the processing of a first game program. The stored backup data is transferred to a second game machine, which uses the backup data during the execution of a second game. Miyamoto et al. teaches multiple processors and multiple memories. In contrast, the present invention is directed to a system that includes a control unit having a processor and a memory coupled to the processor for storing information pertaining to a first program that was previously executed by the processor. The information stored in the memory coupled to the processor is used when a second program is executed by the same processor. When executed by the processor, the second program retrieves information pertaining to the first program from the memory and utilizes the information pertaining to the first program during the execution of the second program. Because the invention employs a control unit that includes a processor and memory coupled to the processor, the invention is substantially less complex than the complex multiple processor system described in the Miyamoto et al. patent.

U.S. Patent No. 6,042,478 (Ng)

Ng is directed to a hand-held video game system having a microprocessor controller with address and data buses for providing memory access during memory cycles to a plurality of cartridge slots for electrically connecting cartridges containing memory to the address and data buses. An output terminal of the microprocessor controller provides a cartridge-select signal that identifies a first memory-containing cartridge to be accessed during an initial memory cycle with a microprocessor controller controlling the output terminal to change the memory-select signal for transparently accessing a second memory-containing cartridge for a second memory cycle. The cartridge slot may also provide a port for transferring and receiving information over a bi-directional communication link in which a communication cartridge allows communication over the Internet, and allows for interactive play of a video game. Clearly, Ng does not make up for the deficiency of Miyamoto et al.

Applicants note that the Office Action cited Ng not as a primary reference but for its alleged disclosure of verifying the validity of retrieved information before utilizing it. Applicants submit that Ng does not teach this subject matter. That is, **Ng does not teach the verification of the validity of retrieved information before utilizing it. All Ng teaches is verification of the authenticity of a cartridge, not verification of the validity of retrieved information before utilizing the retrieved information.**

Rejection of Claims 1, 3, 5-7, 9, 10, 13, 14, 16-20, 22-28, 30, 32, and 33

As noted above, the Office Action rejected Claims 1, 3, 5-7, 9, 10, 13, 14, 16-20, 22-28, 30, 32, and 33 under 35 U.S.C. § 102(e) as being fully anticipated by the teachings of Miyamoto et al. Remarks accompanying this rejection include the following:

As to claim 1, Miyamoto teaches system for sharing data ("...game system. . ." Col. 6 Ln. 22 - 36), a Control Unit (Control Unit 10 Col. 7 Ln. 26-44), a Processor (CPU 11 Col. 7 Ln. 26-37), a Memory (RAM 11/ROMa 15/RAM 15b Col. 7 Ln. 26-44), the memory storing information pertaining to a first program ("...first-machine game software. . ." Col. 7 Ln. 1-4) **that was previously executed by the processor** ("...backup data. . ." Col. 6 Ln. 22-36, Ln. 61-67), a Data Storage Medium (Game Cartridge 25 Col. 6 Ln. 61-67, Col. 7 Ln. 1-4), a Second Program ("...a second-machine game program. . ." Col. 6 Ln. 22-36, Ln. 61-67, Col. 7 Ln. 1-4), retrieving information pertaining to the first program/utilizing the information pertaining to the first program with the execution of the second program ("Using. . ." Col. 6 Ln. 29-36, Ln. 61-67). [Emphasis added.]

Applicants respectfully disagree. In this regard, Claim 1 reads as follows:

1. A system for sharing data between software programs comprising:
 - (a) **a control unit having a processor** and a memory coupled to the processor, **the memory storing information pertaining to a first program that was previously executed by the processor**; and
 - (b) a data storage medium coupleable to the control unit, the data storage medium storing **a second program implementable by the processor for**:
 - (i) retrieving information pertaining to the first program from the memory; and
 - (ii) **utilizing the information pertaining to the first program with the execution of the second program.** [Emphasis added.]

As noted in the above description of Miyamoto et al., Miyamoto et al. does not teach a control unit having a processor in combination with a memory that stores information pertaining to a first program that was previously executable by the processor for utilization by a second program implementable by **the processor**. This subject matter is only taught by the present invention. More specifically, Miyamoto et al. requires two game machines, the first of which obtains backup data, transmitting the backup data to a second game machine using the backup data during the execution of a second game. Miyamoto et al. teaches multiple processors and

multiple memories. In contrast, Claim 1 recites a system that includes a control unit having a processor and a memory coupled to the processor for storing information pertaining to a first program that was previously executed by the processor in a data storage medium that stores a second program executable by the processor. When executed by the same processor, the second program retrieves information pertaining to the first program from memory and utilizes the information pertaining to the first program during the execution of the second program. Because the invention employs a common processor, it is substantially less complex than the complex system described in the Miyamoto et al. patent.

In view of the foregoing, applicants respectfully submit that Claim 1 is clearly not fully anticipated by the teachings of Miyamoto et al and is therefor allowable. Applicants further submit that the claims dependent from Claim 1 (2-5) are allowable for at least the same reasons that Claim 1 is allowable. Of the claims dependent from Claim 1, Claims 3 and 5 are included in the group of claims rejected under 35 U.S.C. § 102(e) as is being fully anticipated by Miyamoto et al. Regarding Claim 3, the Office Action states:

As to claim 3, Miyamoto teaches identifying information pertaining to the second program for sharing with the first program ("...execution in association. . ." Col. 6 Ln. 29-36) and requesting storage of the information pertaining to the second program in the memory for retrieval by the first program (although this step is not explicitly spelt out in using the second-machine game program to play a game by the backup data, the first program could be said to retrieve the second program (second-machine game program) Col. 6 Ln. 61-67.

Initially, applicants point out that the foregoing remarks make it clear that Claim 3 is not rejectable under 35 U.S.C. § 102(e). The remarks include language that clearly states that all of the subject matter of Claim 3 is not "anticipated" by Miyamoto et al. Applicants agree. Moreover, and more importantly, applicants submit that the subject matter of Claim 3 is not taught or suggested by Miyamoto et al. In this regard, Claim 3 reads as follows:

3. The system of Claim 1, wherein the second program implementable by the processor:
- (i) identifies information pertaining to the second program for sharing with the first program; and
 - (ii) requests storage of the information pertaining to the second program in the memory for retrieval by the first program.

Applicants submit that the Miyamoto et al. language "the second-machine game program is executed in association with the first-machine game" (Col. 6, lines 34-36) does not anticipate, much less render obvious, identifying "information pertaining to the second program for sharing with the first program." Nor does Miyamoto et al. suggest requesting "storage of the information pertaining to the second program in a memory for retrieval by the first program" wherein the memory forms part of a control unit having a processor to which the memory is coupled. Consequently, applicants respectfully submit that Claim 3 and Claim 5, which depends from Claim 3, are allowable for reason in additions to the reasons why Claim 1 is allowable.

With respect to Claim 6, the Office Action references the rejection of Claims 1 and 3. For the reasons stated above, applicants respectfully submit that Claim 6 is also clearly allowable.

With respect to Claim 7, the Office Action references the rejection of Claim 1. Frankly, applicants do not understand this rejection since Claim 7, which depends from Claim 6, is not coextensive with Claim 1. With respect to Claims 9 and 10, the Office Action references the rejection of Claim 3. As with Claim 7, applicants do not understand this rejection since the language of Claims 9 and 10, which depend from Claims 7 and 9, respectively, are not coextensive with the recitations of Claim 3.

Applicants respectfully submit that the rejection of Claims 7, 9, and 10 is clearly in error. If this rejection is maintained, applicants respectfully request that the basis for the rejection be set forth in the next Office Action.

With respect to Claim 13, which depends from Claim 7, the Office Action includes the following remarks:

As to claim 13, Miyamoto teaches a First Game Cartridge/a First Video Game Program (Game Cartridge 15/"...first-machine game software..." Col. 6 Ln. 61 - 67, Col. 7 Ln. 1 - 4, Ln. 37 - 67, Col. 8 Ln. 1 - 19) and Second Game Cartridge/a Second Video Game Program (Game Cartridge 25/"...second-machine game program..." Col. 6 Ln. 29 - 36, Ln. 61 - 67, Col. 7 Ln. 1 - 4, Col. 9 Ln. 1 - 29).

Applicants respectfully disagree with the foregoing statement; however, even if correct, it does not address the deficiencies of the prior art with respect to the claims from which Claim 13 depends, specifically Claims 6 and 7. As a result, applicants respectfully submit that Claim 13 is also allowable.

With respect to Claim 14, which depends from Claim 13, the Office Action states as follows:

As to claim 14, Miyamoto teaches the first video game program/first event/status and the status affecting the implementation of the second video game program ("...the backup data gained..." Col. 10 Ln. 7 - 67: NOTE: The backup data gained from playing the first machine is the status used in the implementation of the second game program), altering the performance of the second video game program/producing a second event having a status ("...further backup data..." Col. 10 Ln. 55 - 67) and storing the second event in the memory ("...stored in the Ram 26..." Col. 10 Ln. 55 - 67).

Applicants respectfully disagree with the foregoing statement; however, even if correct, this alleged teaching of Miyamoto et al. does not make up for the failure of Miyamoto et al. to teach the subject matter of the claims from which Claim 14 depends. Consequently, when taken in combination, applicants respectfully submit that Claim 14 is also allowable.

With respect to Claim 16, which depends from Claim 14, the Office Action states as follows:

As to claim 16, Miyamoto teaches retrieving the second event from memory/utilizing the status of the second event to alter the performance of the first video game program ("...read out..." Col. 11 Ln. 1 - 7: NOTE: Although not explicitly taught the altering of the performance of the first video game program is inherent when the backup data is written for updating into the RAM 15b since the implementation of the data in RAM 15b is performed when first machine 10 is playing).

Applicants respectfully disagree. First, applicants point out that the foregoing remarks, in and of themselves, establish that a rejection under 35 U.S.C. §102(e) is unsupportable. The remarks clearly establish that certain of the subject matter recited in Claim 16 is not taught or suggested by Miyamoto et al. More importantly, when the subject matter of Claim 16 is considered in combination with the subject matter of the claims from which Claim 16 depends, the overall combination is clearly not taught or suggested by Miyamoto et al. for the reasons discussed above.

Claims 17 and 18 both depend from Claim 16 and are submitted to be allowable for at least the same reasons that Claim 16 is submitted to be allowable.

Claim 19 was rejected in the Office Action on the same grounds as Claim 1. Applicants respectfully disagree. In this regard, Claim 19, which is an independent claim, reads as follows:

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19. A method for sharing information between **at least two software programs implementable by a processor**, the method comprising:
connecting a first data storage medium having a first program stored therein to said processor;
transferring data pertaining to a first program **to a memory coupled to the processor**;
connecting a second data storage medium having a second program stored therein to the processor; and
retrieving the data pertaining to the first program **from the memory coupled to the processor** and then using said data in connection with the second program. [Emphasis added.]

As generally discussed above with respect to Claim 1 and other claims, Miyamoto et al. **does not teach sharing information between two programs implementably by a processor.** More specifically, Miyamoto et al. does not teach transferring or storing data pertaining to a first program in a memory coupled to a processor, connecting a second data storage medium having a second program stored therein to **the processor**, or retrieving data pertaining to the first program from the memory coupled to the processor and using the data in connection with the second program. As a result, applicants respectfully submit that Claim 19 and all the claims dependent therefrom rejected under 35 U.S.C. § 102(e) based on Miyamoto et al. (20 and 22-27) are allowable.

Applicants submit that many of the claims depending from Claim 19 rejected under 35 U.S.C. § 102(e) based on Miyamoto et al. are allowable for additional reasons generally discussed above with respect to related claims depending from Claims 1 and 6. Consequently, applicants respectfully submit that these claims are allowable for reasons in addition to the reasons why Claim 19 is allowable.

Independent Claim 28, like Claim 19, was rejected in the Office Action for the same reasons that Claim 1 was rejected. Again, applicants respectfully disagree. Claim 28 reads as follows:

28. A data storage medium containing a software program that when implemented by a processor performs the following functions:
(a) retrieves information **provided by another software program from a memory coupled to the processor**; and
(b) utilizes the retrieved information in conjunction with said software program. [Emphasis added.]

As discussed above with respect to independent Claims 1 and 19, Miyamoto et al. does not teach or suggest retrieving information provided by another software program from a memory coupled to a processor executing a software program. While Miyamoto et al. appears to disclose retrieving information, Miyamoto et al. does not teach retrieving information provided by another software program from a memory coupled to a processor. Miyamoto et al. discloses, as discussed above, separate processors. As a result, applicants respectfully submit that Claim 28 and the claim dependent therefrom rejected under 35 U.S.C. § 102(e) based on Miyamoto et al.(29-31) is also allowable.

The Office Action rejected Claim 32 on the same grounds as the rejection of Claims 1 and 3. Again, applicants respectfully disagree. Claim 32 reads as follows:

32. A data storage medium containing a first software program that **when implemented by a processor** performs the following functions:

(a) **identifies information for sharing with a second software program;** and

(b) **stores the identified information in a memory coupled to the processor** for retrieval by the second software program. [Emphasis added.]

As discussed above, Miyamoto et al. does not teach identifying information for sharing with a second software program and storing the identified information in a memory coupled to the processor for retrieval in connection with a second software program. As a result, applicants respectfully submit that Claim 32 and Claim 33, which depends from Claim 32, are also allowable.

Furthermore, with respect to Claim 33, Miyamoto et al. does not teach or suggest retrieving information provided by a first software program from a memory coupled to a processor and utilizing the retrieved information in the implementation of the second program. As a result, applicants respectfully submit that Claim 33 is allowable for reasons in addition to the reasons why Claim 32 is allowable.

Rejection of Claims 2, 8, 11, and 29

As noted above, Claims 2, 8, 11, and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of Miyamoto taken in view of teachings of Ng. Remarks accompanying this rejection read as follows:

As to claim 2 Miyamoto as applied in claim 1, does not teach verification of the validity of the retrieved information before utilizing it. Ng teaches the verification of the validity of the retrieved information before utilizing it (Block 505, Col. 6, Ln. 62 - 76, Col. 7, Ln. 1 - 12). It would have been obvious to apply the teaching of Ng to the system of Miyamoto. One would have been motivated to make such modification to provide cartridge authentication (Col. 6, Ln. 62 - 66).

Applicants respectfully disagree. There is simply no teaching in Miyamoto or Ng how their individual teachings could be combined in any manner much less the manner recited in Claim 2, which depends from Claim 1. As noted above, in contrast to the foregoing statement, Ng does not teach verification of validity of retrieved information before using the information. At best Ng teaches verification of the authenticity of a cartridge, which is different. As a result, applicants respectfully submit that Claim 2, which depends from Claim 1, is clearly allowable.

The Office Action applied the same reasoning to the rejection of Claims 8, 11, and 29 as applied to Claim 1. Applicants respectfully submit, for the reasons discussed above with respect to Claim 2, that the rejection of Claims 8, 11, and 29 is in error and that these claims are also allowable.

Rejection of Claims 4, 12, 15, 21, and 31

As noted above, Claims 4, 12, 15, 21, and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of Miyamoto et al. Remarks accompanying this rejection read as follows:

As to claim 4, claim 3 covers claim 4 except for third program. It would have been obvious to include a third program by introducing a third machine that includes a game cartridge because it would allow more data to be backed up for use in a second-machine.

Applicants respectfully disagree. First, it is pointed out that Claim 4 does not have anything to do with a third machine that indicates a game cartridge. Rather, Claim 4 reads as follows:

4. The system of Claim 1, wherein the first program previously executed by the processor:
 - (i) identifies information pertaining to the second program for sharing with a third program; and
 - (ii) requests storage of the information pertaining to the second program in the memory for retrieval by the third program.

Claim 4 is clearly directed to an embodiment of the invention wherein a first program previously executed by a processor (i) identifies information pertaining to the second program for sharing with a third program and (ii) requests storage of the information pertaining to the second program in the memory for retrieval by the third program. Claim 4 recites nothing with respect to a third machine that includes a game cartridge. As a result, applicants respectfully submit that Claim 4 is allowable for reasons in addition to the reasons why Claim 1 is allowable.

Claims 12, 15, 21, and 31 were rejected on the same grounds as Claim 4. Applicants respectfully submit that, like Claim 4, these claims also recite subject matter that further patentably distinguishes the claims from which these claims depend from the teachings of Miyamoto et al. and, thus, are allowable for the same additional reasons as Claim 4.

CONCLUSION

In summary, applicants submit that contrary to the Office Action, neither Miyamoto et al. alone or in combination with Ng teaches or suggests the subject matter of the claims in this application. Consequently, early and favorable action allowing these claims and passing this application to issue is respectfully solicited.

Respectfully submitted,

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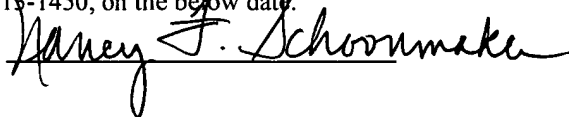
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